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Singulation station 80 will completely separate the ICs from the leadframe to become single packages or devices 10.

IN THE FIGURES

In FIG. 1, please change the two reference numerals "[44]" on the right side of the figure to --45--, as indicated in the enclosed Proposed Drawing Correction.

REMARKS

Claims 1-32 are pending. With this Response, Applicant amends the specification and FIG. 1. Applicant respectfully requests reconsideration of the application as amended.

Objection to the Drawings

The Examiner objects to the drawings because FIG. 1 uses the reference number "44" to refer to two different features. Applicant has amended FIG. 1 so that one of the features is now referred to using reference number "45", and Applicant believes this should address the Examiner's objection. Applicant therefore requests that the Examiner withdraw his objection.

Indefiniteness Rejection

The Examiner rejects claims 5 and 6 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner cites *In re Hutchinson*, 154 F.2d 135, 69 U.S.P.Q. 138 (C.C.P.A. 1946) to support his assertion that the phrase "capable of" recited in Applicant's claim 5 is not a limitation in any patentable sense, and therefore renders claim 5 indefinite. Applicant respectfully disagrees.

Claim 5 recites, *inter alia*, "a positioning apparatus . . . capable of displacement to a first position and a second position." Such functional language is explicitly authorized in M.P.E.P. § 2173.05(g), which states: "Functional language does not, in and of itself, render a claim improper." Section 2173.05(g) also includes examples of court cases in which the functional limitations "incapable of forming a dye with said oxidizing developing agent," "members adapted to be positioned," and "portions being resiliently dilatable" set sufficiently definite boundaries on the patent protection sought to meet the requirements of 35 U.S.C. § 112, second paragraph.

In addition, the *Hutchinson* case the Examiner cites does not support the proposition the Examiner cites it for. In the *Hutchinson* case, the court was concerned **only** with the question of whether Mr. Hutchinson's claims were patentable over the prior art of record; there was no question of whether Mr. Hutchinson's claims were patentable under 35 U.S.C. § 112, second paragraph. In fact, since there was no outstanding indefiniteness rejection of the claims, apparently the Examiners, the Board of Appeals, and the Court of Customs and Patent Appeals all agreed that the claims were patentable under 35 U.S.C. § 112, second paragraph. Also, since claim 42 of the Hutchinson application included a recitation of "metal stock . . . **capable of** being machined under heat generating conditions in accordance with the template design," it would seem that the *Hutchinson* case actually stands for the proposition that the use of "capable of" in a claim does not render the claim indefinite.

As the M.P.E.P. states in section 2173.02: "The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity." Applicant's use of the phrase "capable of displacement to a first position and a second position" in claim 5 is clear and precise, and clearly defines the patent protection Applicant seeks. Applicant therefore respectfully requests that the Examiner withdraw his indefiniteness rejection of claim 5 and claim 6 (which depends from claim 5).

Anticipation Rejection

The Examiner rejects claims 7-32 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,733,459 to Tateno.

Claim 7 recites:

7. An integrated circuit testing apparatus for testing an integrated circuit leaving an integrated circuit singulation station, comprising:
 - a receiving apparatus positioned to receive untested integrated circuits from the integrated circuit singulation station;
 - a testing apparatus positioned to receive the untested integrated circuits from the receiving apparatus and test the integrated circuits to identify defective integrated circuits and non-defective integrated circuits, said testing apparatus including a holding station, a first position, and a second position, said testing apparatus while in said first position allowing tested integrated circuits to proceed to said holding station and allowing untested integrated circuits to be received from said receiving apparatus; and
 - a separating apparatus connected to the testing apparatus to separate defective integrated circuits from non-defective integrated

circuits after testing thereof, said separating apparatus including a defective integrated circuit track for the defective integrated circuits and a non-defective integrated circuit track for the non-defective integrated circuits.

In contrast, Tateno fails to disclose “an . . . apparatus for testing an integrated circuit leaving an integrated circuit singulation station,” as recited in Applicant’s claim 7. Instead, Tateno discloses a part insertion apparatus for parts leaving stick containers 20. Although the Examiner asserts that the stick containers 20 comprise a “singulation station,” Applicant respectfully disagrees. In column 1, lines 33 and 34, Applicant makes it clear that a singulation station separates a group of attached devices into individual devices. In contrast, in the stick containers 20, the devices are simply stacked serially, and are already separated. Therefore, from the outset, Tateno fails to disclose the very type of apparatus that Applicant claims.

Also, since Tateno fails to disclose a “singulation station,” it also fails to disclose “a receiving apparatus positioned to receive . . . integrated circuits from the . . . singulation station,” as recited in Applicant’s claim 7. Instead, the alleged receiving apparatus 30 of Tateno is positioned to receive integrated circuits from the stick containers 20, which do not comprise a singulation station.

Further, Tateno discloses no “testing apparatus,” as recited in Applicant’s claim 7, whatsoever. Although the Examiner asserts that the hand 44 of Tateno is a testing apparatus, Applicant respectfully disagrees. As far as Applicant can determine, there is no indication anywhere in Tateno that the hand 44 performs any test function whatsoever. Instead, the hand 44 is merely described as a device for inserting integrated circuits into a test board 15 **for later testing by other, undisclosed devices** (*i.e.*, no testing is performed by the apparatus illustrated in the figures of Tateno).

In addition, Tateno fails to disclose a “separating apparatus,” as recited in Applicant’s claim 7. Although the Examiner asserts that the elevator 60 comprises a separating apparatus, Applicant again respectfully disagrees. Applicant’s claimed “separating apparatus” separates “defective integrated circuits from non-defective integrated circuits.” In contrast, Tateno’s elevator 60 merely moves test boards up and down so they can be shuffled between the PC board operating portion 70 and the XY table 51.

For all of the reasons stated above, Applicant’s claim 7 is not anticipated by Tateno. Applicant therefore respectfully requests that the Examiner withdraw his anticipation rejection of

claim 7. Also, since claims 8 and 9 depend from claim 7, Applicant requests that the Examiner withdraw his anticipation rejection of these claims as well.

For the reasons stated above with respect to claims 7-9, claims 10-12 are also not anticipated by Tateno. Applicant therefore respectfully requests that the Examiner withdraw his anticipation rejection of these claims as well.

Claim 13 recites:

13. A method of testing an integrated circuit in a testing apparatus having a test site, a holding station, a first position, and a second position, after the singulation of the integrated circuit in an integrated circuit singulation apparatus, said method comprising the steps of:
transferring the integrated circuit from the integrated circuit singulation apparatus;
receiving the integrated circuit at the testing apparatus while the testing apparatus is in the first position;
moving the testing apparatus to the second position;
testing the integrated circuit to identify defective and non-defective conditions of the integrated circuit;
moving the testing apparatus to the first position to allow the tested integrated circuit to proceed to the holding station while receiving a second singulated integrated circuit into the testing apparatus; and
separating the defective and non-defective integrated circuits.

As discussed above, Tateno fails to disclose a singulation apparatus, so Tateno accordingly fails to disclose the step of “transferring the integrated circuit from the . . . singulation apparatus,” as recited in Applicant’s claim 13. Also, as discussed above, Tateno fails to disclose a testing apparatus, so Tateno accordingly fails to disclose the steps of “receiving the integrated circuit at the testing apparatus,” “moving the testing apparatus to the second position,” and “moving the testing apparatus to the first position,” as recited in Applicant’s claim 13. Further, as discussed above, Tateno fails to disclose “separating . . . defective and non-defective integrated circuits,” as recited in Applicant’s claim 13.

Therefore, for all the reasons stated above, Applicant respectfully requests that the Examiner withdraw his anticipation rejection of claim 13. Since claims 14 and 15 depend from claim 13, Applicant also respectfully requests that the Examiner withdraw his anticipation rejection of these claims as well. Also, for the same reasons as discussed above with respect to claims 13-15, claims 16-24, 27-28, and 31-32 are also not anticipated by Tateno, so Applicant respectfully requests that the Examiner withdraw his anticipation rejection of these claims as well.

Claim 25 recites:

25. An apparatus for testing singulated integrated circuits, comprising:
a testing apparatus movable between a first position and a second position receiving untested integrated circuits while in said first position and identifying first and second test conditions of an integrated circuit while in said second position; and
a separating apparatus coupled to and movable between the first position and the second position, receiving tested integrated circuits from said testing apparatus while in said first position and releasing tested integrated circuits having the first test condition while at said first position and releasing tested integrated circuits having the second test condition while at said second position.

As discussed above, Tateno fails to disclose a “testing apparatus” or a “separating apparatus,” as recited in Applicant’s claim 25, so Tateno fails to anticipate claim 25. Applicant therefore respectfully requests that the Examiner withdraw his anticipation rejection of claim 25. Also, since claim 26 depends from claim 25, Applicant requests that the Examiner withdraw his anticipation rejection of this claim as well. Further, for the same reasons discussed above with respect to claims 25-26, claims 29-30 are also not anticipated by Tateno, so Applicant requests that the Examiner withdraw his anticipation rejection of these claims as well.

Allowed Claims

The Examiner indicates that claims 1-4 are allowed. Applicant wishes to thank the Examiner for this indication of allowance.

Allowable Claims

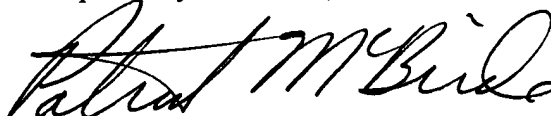
The Examiner indicates that claims 5 and 6 would be allowable if rewritten to overcome the Examiner’s indefiniteness rejection. Applicant wishes to thank the Examiner for this indication of allowability. However, as discussed above, Applicant believes claims 5 and 6 are allowable as written.

Conclusion

All of the claims under consideration are now in condition for allowance. If the Examiner believes a telephone conversation would help in resolving any problems he believes remain in the

application, Applicant encourages the Examiner to telephone the undersigned attorney to further a prompt resolution of any such problems.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Patrick McBride". The signature is fluid and cursive, with the first name "Patrick" written in a smaller, more compact script than the last name "McBride".

Patrick McBride

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